Data Collection Campaign to Support Detection and Classification of Targets in Heavy Clutter

Sensors Group - SEN TP-4 and SEN AG-5

Land Vehicle Targets
4 Landrovers
ASLAV
Ground Truthing
MUST 2000 - Primary Sensors
HYMAP - airborne hyperspectral spectrometer
JP129 - Multimode X-band SAR and M20 Thermal Imager
Imaging Laser Radar (ILR) - 1.54µm
Liquid Crystal Tunable Filter Vis/NIR Imaging Spectrometer, Hyperspectral Imager, High-Resolution Visible Camera
Uncooled Microbolometers (2)
AHI - LWIR airborne hyperspectral (256-band) imager
LANDSAT - VNIR/SWIR/LWIR mapper
IKONOS satellite - Multispectral hi-res VNIR imager
STAIRS C - LWIR thermal imager
Spectra-cube - Vis/NIR FT hyperspectral imager, 400-1000nm FPA
SPIRIT - 3-5µm Hyperspectral imager
Multi-Waveband Imaging Sensor - VNIR/MWIR/LWIR broad band imager
3-5µm MWIR imager on TSX-5 satellite
PIRATE 3 - 2-5 µm Hyperspectral Imaging FT spectrometer
VISIR - Visible/UV/NIR/MWIR/LWIR optically co-registered detectors
Radarsat - C-Band med-res SAR
SPOT satellite - VNIR/SWIR med-res imager
ERS-2 satellite - C-Band lo-res SAR

The MUST 2000 Trial was conducted at Cowley Beach, Queensland, Australia in May 2000. In one experiment, military and civilian targets in a range of cover were simultaneously viewed by diverse electro-optical, multi/hyperspectral and radar airborne, ground-based and space-based sensors under tropical conditions.

Program Name: MUST-2000 and associated trials conducted by SEN TP-4 and SEN AG-5.

Objective: To collect multisensor/multispectral/ hyperspectral data to support national and joint programs in detection and classification of targets in heavy clutter

Payoff: Will provide a basis for quantitative assessment of the utility of individual and integrated targeting and surveillance sensors.

Participants:

DSTO DREO DERA CECOM

http://www.dtic.mil/